



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,999	10/31/2003	Abdlmonem H. Beitelmal	10014769-2	8245

7590 05/03/2004  
HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

EXAMINER VORTMAN, ANATOLY	
ART UNIT 2835	PAPER NUMBER

DATE MAILED: 05/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/696,999	Applicant(s) BEITELMAL ET AL.	
	Examiner Anatoly Vortman	Art Unit 2835	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004 (Election).
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 10-13 and 21-32 is/are pending in the application.
- 4a) Of the above claim(s) 26-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-13 and 21-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input checked="" type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                        |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>1003</u> . | 6) <input type="checkbox"/> Other: _____   |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of claims 10-25 in Response filed on 03/18/04 is acknowledged. The traversal is on the ground(s) that "it is believed that all of the embodiments of this application can be examined at the same time without serious burden". This is not found persuasive because as it was stated in the Restriction Requirement, one group of claims (Group I) is directed to a method of cooling, while and another group of claims (Group II) is directed to an apparatus for practicing the aforementioned method (i.e. a computer storage medium). Hence, for example in order to search the method, the Examiner should concentrate the search in ventilation and cooling fields of endeavor, wherein in order to search the apparatus, the Examiner should concentrate the search in an entirely different field of endeavor which deals with computer storage media and/or memory devices.

The requirement is still deemed proper and is therefore made FINAL.

Non-elected claims 26-32 are hereby withdrawn from further consideration on the merits.

From the elected claims, claims 14-20 have been cancelled by Preliminary Amendment filed on 10/31/03. Thus, claims 10-13 and 21-25 will be considered on the merits.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2835

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10-13 and 21-25 are rejected under 35 U.S.C. 102(b) as being anticipated by US/4,997,030 to Goto et al., (Goto).

Goto disclosed (Fig. 1, 2) a method of cooling a plurality of heat generating components (69a-b) of an electronic system having an enclosure (11) and a plenum (43) located within said enclosure (11), said method comprising activating at least one variable speed blower (33) (column 3, line 28) and a plurality of individually controlled valves (57a-c), each of said valves terminating substantially close to a respective heat generating component (69a-b), to thereby supply cooling fluid to said heat generating components, sensing the temperatures (a plurality of temperature sensors provided in corresponding remote controllers (69a-c) (see column 5, lines 15-17)) of each of said heat generating components (69a-c); determining whether said sensed temperatures are within a predetermined temperature range and individually varying said supply of said cooling fluid to said heat generating components in response to said sensed temperatures falling outside of said predetermined temperature range by increasing or decreasing the speed of said at least one blower (33) and by individually closing or opening said valves (57a-c) (Fig. 5, column 4, lines 40+, columns 5-7).

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US/6123266, 5477417, 4756473, 6414843, 6319114, 6336592, 6205796, and 6349385 disclosed adaptive cooling systems for electronic devices with variable speed blowers.

US/5850968 and 6640890 disclosed adaptive air conditioning arrangements.

US/6280318, 6525936, 4417295, and 5566377 disclosed thermal management arrangements for electronic devices, wherein cooling fluid is supplied individually to each of a plurality of heat generating components.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anatoly Vortman whose telephone number is 571-272-2047. The examiner can normally be reached on Monday-Friday, between 10:00 am and 6:30 pm..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Darren Schuberg can be reached on 571-272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AV.



Anatoly Vortman  
Primary Examiner  
Art Unit 2835